U.S. Department of the Interior
Bureau of Land Management
White River Field Office
73544 Hwy 64
Meeker, CO 81641

ENVIRONMENTAL ASSESSMENT

NUMBER: CO-110-2005-066-EA

CASEFILE/PROJECT NUMBER (optional)**:** Right of Way COC68450

PROJECT NAME: Mallard 4804 Pipeline (Lease COC 62805)

LEGAL DESCRIPTION: Sixth Principal Meridian, Colorado

Proposed Route: T. 1 S., R. 97 W.,
Sec. 18: Lot 4, E½W½ (on lease).
Sec. 19: Lot 1, SW¼NE¼, E½NW¼, N½SE¼.

Alternate Route: T. 1 S., R. 97 W.,
Section 18: Lot 4, E½W½ (on lease).
Section 19: Lots 1, 2, 3, SW¼NE¼, NE¼SW¼, N½SE¼.

APPLICANT: EnCana Oil and Gas (USA), Inc.

DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES:

Proposed Action: The applicant proposes to install a buried natural gas pipeline on public lands within the Piceance Basin, Rio Blanco County, Colorado. The applicant requests the grant include installation of a buried main trunk pipeline up to 16 inches in diameter and related facilities (including valves, drips, metering equipment), for the Mallard gathering area. The applicant also requests the grant allow for construction of a waterline up to 10 inches in diameter and communications systems lines, if necessary, all within this same easement. These additional lines would be buried in a trench along side the 16 inch within the 30-foot permanent right of way (ROW) easement.

The pipeline would tie-in the Mallard 4804 well in the NE¼NW¼ of Section 18, T. 1 S., R. 97 W. to a tie-in point on the existing American Soda pipeline in the NE¼SE¼ of Section 19, T. 1 S., R. 97 W. (See Figures 1 and 2). The Mallard 4804 well has already been drilled and is capped and ready to produce.

The proposed route would be 10,770 feet in length (2.04 miles) and entail approximately 10.4 acres of surface disturbance. The applicant requests a 30 foot wide permanent right-of-way with a paralleling 30 foot wide temporary use area to be utilized during construction of the pipeline.

The route would parallel on the east side of the existing access road for the Mallard 4804 well from the well in a southerly direction for approximately 6,525 feet to a turning point in Lot 1 of Section 19, T. 1 S., R. 97 W. The existing road would be used for the temporary use area for this segment of the route. An additional 30-foot ROW would be required adjacent to the road, disturbing approximately 4.50 acres for this segment.

From the turning point in the Lot 1 of Section 19, T. 1 S., R. 97 W., the route would proceed south easterly across undisturbed ground for approximately 2,750 feet to a crossing point on Rio Blanco County Road 83 (RBC 83) in the SW¼NE¼ of Section 19, T. 1 S., R. 97 W. A 60-foot wide disturbance of approximately 3.80 acres would occur along this segment of the route.

From the crossing point on RBC 83 in the SW¼NE¼ of Section 19, T. 1 S., R. 97 W., the route would continue southeast then easterly for approximately 1,495 feet to the tie-in point on the existing American Soda pipeline in the NE¼SE¼ of Section 19, T. 1 S., R. 97 W. This segment is adjacent to an existing disturbance (chain link fence and overhead powerline) on the southeast side of the American Soda facility. A 60-foot wide disturbance of approximately 2.06 acres would occur along this final segment.

Buried pipeline installation would entail:

- Clearing vegetation from the right-of-way and stripping and separating topsoil.
- Trenching with a track ditcher such that the pipe will be buried with a minimum cover of 36 inches and trench width would be 24 inches maximum.
- Steel pipe would be welded and fusion bonded (coated) on the surface and laid in the trench by sideboom tractors.
- Material removed in the trenching process will be replaced over the pipe and compacted to prevent subsidence.
- Re-contouring to the original contours will be completed throughout the route; topsoil would be redistributed over the disturbance.
- Drainages encountered would be cleared of debris and dirt and back sloped as near as possible to their original condition to allow for continuance of previous flow patterns.
- A seed mixture will be designated by the Authorized Officer. Seeding will be done during fall planting season, September 15 through first frost.
- Waterbars are to be constructed at least one (1) foot deep, on the contour with approximately two (2) feet of drop per 100 feet of waterbar to ensure drainage, and extended into established vegetation.
- All waterbars are to be constructed with the berm on the downhill side to prevent the soft material from silting in the trench. The initial water bar should be constructed at the top of the backslope.
- All above ground facilities would be painted a color designated by the authorized officer.
- Upon completion, the route will be cleared of all trash and debris and disposed of in an approved landfill.

No staging areas are proposed on public land. Construction of the proposed pipeline is estimated to be completed in 30 days. Construction costs estimated by the applicant are approximately $268,700.

Alternative Route: An alternate route which parallels existing roads for most of its length is being considered in this EA. The alternate route would follow some of the same segments considered in the Proposed Action which are adjacent to existing roads or prior disturbances. Total length of the alternate route would be approximately 14,260 feet (2.7 miles). Total surface disturbance along this route would be approximately 12.8 acres. The alternate route would exceed the length of Proposed Action by 3,510 feet and result in 2.4 acres of surface disturbance above that of the Proposed Action.

The alternate route would parallel the Mallard 4804 well access road from the well in a southerly direction for approximately 9,950 feet (1.9 miles) to the intersection with RBC 83 in Lot 3 of Section 19, T. 1 S., R. 97 W. The access road would be used for the temporary use area requiring only a 30 foot disturbance along side the road. Approximately 6.87 acres of new disturbance would occur along this segment of the route. The initial 6,425 feet of this segment from the well is the same route as proposed in the Proposed Action.

The alternate route would then cross RBC 83 at this intersection. The route would turn northeast along the east side of RBC 83 for approximately 2,735 feet to a point along side RBC 83 in the SW¼NE¼ of Section 19, T. 1 S., R. 97 W. This is the same point that the route would cross RBC 83 in the Proposed Action. Rio Blanco County will not allow the running surface of RBC 83 to be used for the temporary use area during construction. Thus, a 60-foot wide disturbance adjacent to RBC 83, as topography allows, would be required along this segment resulting in approximately 3.80 acres of new surface disturbance.

The final segment of the alternate route would follow the same route considered in the Proposed Action from the point along side RBC 83 in the SW¼NE¼ of Section 19, T. 1 S., R. 97 W to the tie-in point on the existing American Soda pipeline in the NE¼SE¼ of Section 19, T. 1 S., R. 97 W. This final segment is approximately 1,575 feet in length and would require a 60-foot wide surface disturbance of approximately 2.17 acres.

Construction costs estimated by the applicant for the alternate route are approximately $351,500, $82,800 above that of the Proposed Action.

No Action Alternative: The easement requested by the applicant for a pipeline to produce gas from the existing Mallard 4804 well would not be granted. The Mallard 4804 well would remain capped and out of production.

ALTERNATIVES CONSIDERED BUT NOT CARRIED FORWARD:

NEED FOR THE ACTION: All of the proposed or potential actions analyzed in this EA are being pursued by EnCana Oil and Gas (USA), Inc. in order to exercise its federal mineral lease rights.

PLAN CONFORMANCE REVIEW: The Proposed Action is subject to and has been reviewed for conformance with the following plan (43 CFR 1610.5, BLM 1617.3):

Name of Plan: White River Record of Decision and Approved Resource Management Plan (ROD/RMP).

Date Approved: July 1, 1997

Decision Number/Page: Page 2-5: "Make federal oil and gas resources available for leasing and development in a manner that provides reasonable protection for other resource values."

Page 2-49 thru 2-52: "To make public lands available for the siting of public and private facilities through the issuance of applicable land use authorizations, in a manner that provides for reasonable protection of other resource values."

AFFECTED ENVIRONMENT / ENVIRONMENTAL CONSEQUENCES / MITIGATION MEASURES:

STANDARDS FOR PUBLIC LAND HEALTH: In January 1997, Colorado Bureau of Land Management (BLM) approved the Standards for Public Land Health. These standards cover upland soils, riparian systems, plant and animal communities, threatened and endangered species, and water quality. Standards describe conditions needed to sustain public land health and relate to all uses of the public lands. Because a standard exists for these five categories, a finding must be made for each of them in an environmental analysis. These findings are located in specific elements listed below.

CRITICAL ELEMENTS

AIR QUALITY

Affected Environment: The project area is within a Class II Prevention of Significant Deterioration (PSD) air quality area. No Class I PSD areas are within 40 miles of the project area. The principal air quality parameter likely to be affected by construction of the pipeline is the inhalable particulate level (PM_{10} - particles ten microns or less in diameter) associated with fugitive dust. Although no monitoring data are available for the survey area, it can be surmised that the air quality is good because the Colorado Air Pollution Control Division (APCD) estimates the maximum PM_{10} levels (24-hour average) in rural portions of western Colorado like the Piceance Basin to be less than 50 micrograms per cubic meter. This estimate is well below the National Ambient Air Quality Standard (NAAQS) for PM_{10} (24-hour average) of 150 $\mu g/m^3$.

Environmental Consequences of the Proposed Action: The construction of the pipeline would result in short term, local impacts on air quality during and after construction, due to dust being blown into the air. However, airborne particulate matter would not exceed Colorado air quality standards on an hourly or daily basis. Following successful revegetation of the site, airborne particulate matter should return to near pre-construction levels.

Environmental Consequences of the Alternate Route: Same.

Environmental Consequences of the No Action Alternative: None

Mitigation: Permitting of all regulated air pollution sources through the Colorado Department of Public Health and Environment (CDPHE), Air Pollution Control Division, will assure compliance with all federal and state standards.

CULTURAL RESOURCES

Affected Environment: The proposed and alternative pipeline routes were inventoried at the Class III (100% pedestrian) level in three separate surveys. The two routes are coterminous for the first 6,425 feet from the Mallard 4804 gas well south along the existing access road (Figure 2). This route was surveyed in 1999 when the access road and well were proposed (Wolfe 1999, Compliance Dated 12/28/1999). The survey corridor included 50 feet on either side of the road centerline. The alternative pipeline route continues on the access road to its intersection with Rio Blanco County Road 83 and is covered by the 1999 survey to that point. After the first 6,425 feet, the proposed pipeline route turns and leaves the access road, proceeding east for another 4,325 feet. The 200 feet immediately after the turn were surveyed in February, 2005 (Conner 2005, Compliance Dated 2/14/2005). The remainder of the proposed pipeline route to the tie-in with the American Soda pipeline and the remainder of the alternative route to the same point are located on lands included in a block survey for the original American Soda lease (Conner, Davenport, and Koeman 1998, Compliance Dated 9/11/1998). No cultural resources were identified in the 2005 survey by Conner. The 1999 survey of the access road identified no cultural properties considered eligible for the National Register of Historic Places. The 1998 block survey however identified numerous cultural resources including many near the proposed route after it leaves the existing road and proceeds cross country through an area that has not been previously disturbed.

Environmental Consequences of the Proposed Action: For the first 6,425 feet of the proposed route from the Mallard 4804 well, pipeline construction would not impact any identified cultural resources as long as pipeline construction activities remained within the corridor covered in the 1999 survey of the access road. A stipulation specifying this constraint and permitting the use of the existing road as a temporary work area would assure that conclusion. Construction of the pipeline through the remaining 4,325 feet of the proposed route could inadvertently impact cultural resources because of the density of sites near the route. A stipulation underlining the applicant's accountability for site integrity and requiring additional measures to assure site avoidance would remove the risk of inadvertent impacts.

Environmental Consequences of the Alternate Route: For the portion of the route along BLM Roads 1146 and 1147 (to the intersection with County Road 83), no impact on any identified cultural resources would occur as long as pipeline construction activities remained within the corridor covered in the 1999 survey of the access road. A stipulation specifying this constraint and permitting the use of the existing road as a temporary work area would assure that conclusion. The final portion of this route would parallel County Road 83 as topography allows. Because a specific route has not been flagged, construction on the route could inadvertently

impact cultural resources. A stipulation underlining the applicant's accountability for site integrity and requiring additional measures to assure site avoidance would remove the risk of inadvertent impacts.

Environmental Consequences of the No Action Alternative: None

Mitigation: 1. The applicant is required to contain any construction activity and disturbance along BLM Roads 1146 and 1147 within a 30 foot corridor immediately adjacent to the roads. In support of that requirement, the applicant will be permitted to use the surface of the existing road as a temporary work area.

2a. To assure avoidance of cultural resources along the proposed pipeline route from BLM Road 1146 to the tie-in at the American Soda pipeline, the applicant is required to take additional measures to maintain site integrity. These measures could include employment of a BLM-certified archaeologist to monitor construction through that portion of the route or checks by a BLM-certified archaeologist before and after construction to document that no disturbance occurred. The checks would include detailed photo-documentation of the site condition before and after construction and detailed accounting of artifact presence.

2b. To assure avoidance of cultural resources along the alternative pipeline route along Rio Blanco County Road 83 from BLM Road 1147 to the tie-in at the American Soda pipeline, the applicant is required to take additional measures to maintain site integrity. These measures could include employment of a BLM-certified archaeologist to monitor construction through that portion of the route or checks by a BLM-certified archaeologist before and after construction to document that no disturbance occurred. The checks would include detailed photo-documentation of the site condition before and after construction and detailed accounting of artifact presence.

3. The operator is responsible for informing all persons who are associated with the project operations that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are uncovered during any project or construction activities, the operator is to immediately stop activities in the immediate area of the find that might further disturb such materials, and immediately contact the AO. Within five working days, the AO will inform the operator as to:

- whether the materials appear eligible for the National Register of Historic Places,
- the mitigation measures the operator will likely have to undertake before the site can be used (assuming in situ preservation is not necessary),
- a timeframe for the AO to complete an expedited review under 36 CFR 800-11 to confirm, through the State Historic Preservation Officer, that the findings of the AO are correct and that mitigation is appropriate.

If the operator wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the operator

will be responsible for mitigation cost. The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that the required mitigation has been completed, the operator will then be allowed to resume construction.

4. Pursuant to 43 CFR 10.4(g) the holder of this authorization must notify the AO, by telephone, with written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony. Further, pursuant to 43 CFR 10.4 (c) and (d), the holder must stop activities in the vicinity of the discovery and protect it for 30 days or until notified to proceed by the AO.

INVASIVE, NON-NATIVE SPECIES

Affected Environment: No noxious or invasive species are known to exist in the immediate project area. Canada thistle and houndstongue have occurred as spot infestations along County Road 83 approximately 2 miles north of the proposed pipeline route. Occurrences of cheatgrass were observed on disturbed areas scattered along the access road to the Mallard 4804 well and on the well pad.

The pipeline route was walked on January 26, 2005. Snow cover was about 50 percent. No obvious infestations of noxious weeds or invasive species were noted. Although the dates of observation were not optimal and well beyond the end of the growing season, identification of these invaders is often possible from skeletal portions of the plant remaining on site.

Environmental Consequences of the Proposed Action: The disturbance associated with the proposed action could create a noxious weed problem by importing weed seed on vehicles and equipment or by having suitable conditions present (non-vegetated disturbed areas) for introduction of noxious weeds by other vectors.

In addition to noxious weeds, invasive non-native species such as cheatgrass could likely become a problem on disturbed areas. Cheatgrass occurrences are scattered near the proposed route for most of its length. Cheatgrass invasion is very likely if the disturbance is not reclaimed immediately following the disturbance.

Establishment of noxious or invasive weeds would create problems through seed production in proportion to the number of plants and the duration they are reproducing. Increased seed production of noxious or invasive plants could aggressively compete with or exclude desired vegetation during reclamation. The noxious or invasive species seed production could also encourage the spread of these unwanted plants into the adjacent native plant communities.

Environmental Consequences of the Alternate Route: The impacts anticipated under the Proposed Action are also anticipated along the alternate route. The alternate route would result in approximately 2.4 acres of additional disturbance which could be subject to invasion of noxious or invasive species.

Environmental Consequences of the No Action Alternative: None

Mitigation: Eliminate any noxious plants before any seed production has occurred. Eradication should make use of materials and methods approved in advance by the Authorized Officer.

The operator will clean all off-road equipment to remove seed and soil prior to commencing operations on public lands within the project area.

The operator will be required to monitor disturbed areas for any noxious or invasive species within the ROW area. Monitoring should occur until successful reclamation efforts have been achieved.

The operator will be required to attain sufficient cover of native reclamation species (similar to that of nearby undisturbed plant communities) by controlling invasive plant species by methods approved in advance by the Authorized Officer.

Other mitigation is included in the Vegetation section.

MIGRATORY BIRDS

Affected Environment: The sagebrush and pinyon/juniper communities found within the project area support a large array of migratory birds that nest during the months of May, June and July. Bird populations associated with these communities that have a high conservation interest (i.e., Rocky Mountain Bird Observatory, Partners in Flight program) are listed in the following table. There are no specialized or narrowly endemic species known to occupy the project area.

Birds of High Conservation Priority by Habitat Association

Sagebrush	Pinyon-juniper
Brewer's sparrow Green-tailed towhee	Pinyon jay, black-throated gray warbler, Juniper titmouse, gray flycatcher, violet-green swallow

The pipeline will be located on a relatively flat ridge top supporting a mosaic of sagebrush parks and pinyon/juniper woodlands. The general area has seen considerable development with the construction of the American Soda Plant and nearby utility corridors. Existing county and BLM roads as well as an old chaining also occur along the proposed route.

Environmental Consequences of the Proposed Action: Construction of the pipeline will remove 10.4 acres of sagebrush and pinyon/juniper habitat. Construction during the migratory bird nesting season (May through July period) would be disruptive and nests could be lost. Recent studies suggest that nesting density tends to be reduced (i.e., 50%) in close proximity (i.e., within 300') of roads. Typically one pair of high interest bird species occur per hectare. Since most of the route will occur adjacent to existing roads the nesting density would likely be at the lower level. Although the proposed actions would represent an incremental and longer term reduction in big sagebrush and pinyon/juniper woodland, implementation of the proposed

actions would have no measurable influence on the abundance or distribution of breeding migratory birds at any landscape scale.

Environmental Consequences of the Alternate Route: The alternative route would remove slightly over 12.8 acres of sagebrush and pinyon/juniper habitat. Impacts during the nesting season and to nesting density would be the same as the Proposed Action. Implementation of the alternate route would have no measurable influence on the abundance or distribution of breeding migratory birds at any landscape scale.

Environmental Consequences of the No Action Alternative: None

Mitigation: None

THREATENED, ENDANGERED, AND SENSITIVE ANIMAL SPECIES (includes a partial finding on Standard 4)

Affected Environment: The area of the proposed action includes no federally-listed animal species and no habitat for such species. The special status species of concern in the general area include two Colorado BLM Sensitive Species, greater sage-grouse and northern goshawk.

Although a significant portion of this project occurs in a Wyoming big sagebrush habitat, the project is located approximately six miles from the designated overall greater sage-grouse range. The project area is outside the current distribution of sage-grouse and no evidence of sage-grouse was noted along the proposed route.

Use of pinyon/juniper woodland by goshawk for nesting has been widely documented in the West, but their contribution to goshawk distribution, abundance, and population viability is of small consequence. Although a number of studies and surveys attribute little if any potential to pinyon/juniper woodland for goshawk, northern goshawk remain a relatively rare breeding species in this Resource Area. Summering birds are most commonly observed at higher elevations (>7,100 feet) where Douglas-fir occur as pure stands or as smaller inclusions among pinyon/juniper woodlands. However, over the past 30 years 3 nests have been found in mature mid-elevation pinyon/juniper woodlands as low as 6,500 feet in elevation. Based on these few instances, the birds appear to site their nests in large continuous tracts of mature woodlands deep (1,000 feet or more) in stand interiors. The project area contains no pinyon/juniper woodlands that can be remotely considered large continuous stand of large mature trees.

Environmental Consequences of the Proposed Action: Thorough ground surveys of woodlands potentially influenced by pipeline construction were conducted by WestWater Engineering in February 2005 in coordination with WRFO wildlife staff. Biologists found no indications of past or current nest activity by woodland raptors. No impact is expected to sensitive species or their habitat.

Environmental Consequences of the Alternate Route: No impact is expected to sensitive species or their habitat.

Environmental Consequences of the No Action Alternative: None.

Mitigation: None.

Finding on the Public Land Health Standard for Threatened & Endangered species: The standard for Threatened and Endangered and Sensitive Species will be met as no species within these categories occur within the project area.

THREATENED, ENDANGERED, AND SENSITIVE PLANT SPECIES (includes a partial finding on Standard 4)

Affected Environment: Previous surveys conducted in this area have located and documented nearby populations of two Sensitive, Special Status (SSS) plants, *Lesquerella congesta* (Dudley Bluffs bladderpod) and *Physaria obcordata* (Piceance twinpod), both listed as Threatened under the Endangered Species Act. In this area, both species are restricted to relatively barren outcrops of the Thirteen Mile Creek Tongue of the Green River Formation.

Two botanical surveys conducted in 1998 and in 2000 cover the areas encountered by the proposed route as well as the alternate route. A block survey of the American Soda sodium lease area (Young et al., 1998) covered the areas of the proposed and alternate routes which lie in the SW¼NE¼, E½NW¼, NE¼SW¼, N½SE¼ of Section 19, T. 1 S., R. 97 W. The other survey was conducted for the access road from County Road 83 to the Mallard 4804 well (Young et al., 2000). The later survey covered the areas encountered by the proposed and alternate routes which would be adjacent to the access road to the Mallard 4804 well.

Neither survey found any special status species of plants near the two routes. Neither survey located any potential habitat for these species near the two routes. Both routes occur on soils derived from the Uinta Formation. This formation is not suitable habitat for any special status plants.

Environmental Consequences of the Proposed Action: No impact to any special status species of plants would occur from construction of the proposed pipeline.

Environmental Consequences of the Alternate Route: No impact to any special status species of plants would occur from construction of the pipeline along the alternate route.

Environmental Consequences of the No Action Alternative: None.

Mitigation: None.

Finding on the Public Land Health Standard for Threatened & Endangered species: The standard with regard to the special status species of plants is being met and will continue to be met. The project is not in or near suitable habitats for any special status plants.

WASTES, HAZARDOUS OR SOLID

Affected Environment: There are no known hazardous or other solid wastes on the subject lands. No hazardous materials are known to have been used, stored or disposed of at sites included in the project area.

Environmental Consequences of the Proposed Action: No listed or extremely hazardous materials in excess of threshold quantities are proposed for use in this project. While commercial preparations of fuels and lubricants proposed for use may contain some hazardous constituents, they would be stored, used and transported in a manner consistent with applicable laws, and the generation of hazardous wastes would not be anticipated. Solid wastes would be properly disposed of.

Environmental Consequences of the Alternate Route: Same.

Environmental Consequences of the No Action Alternative: No hazardous or other solid wastes would be generated under the no-action alternative.

Mitigation: The operator shall be required to collect and properly dispose of any solid wastes generated by this project.

WATER QUALITY, SURFACE AND GROUND (includes a finding on Standard 5)

Affected Environment: Surface Water: The Proposed and Alternative pipeline alignments lie within areas that are tributary to Yellow Creek and Piceance Creek. Yellow Creek and Piceance Creek are tributaries of the White River which ultimately flows into the Colorado River. Water quality standards and guidance for drainages within the Lower Colorado River Basin are included in Colorado Department Public Heath and Environment – Water Quality Control Commission (CDPHE-WQCC) Regulation No. 37 (2004a).

Yellow Creek is listed as the mainstem of Yellow Creek, including all tributaries, from the source to the confluence with the White River – Segment 13b of the White River. Yellow Creek has use designations of aquatic life warm 2, recreation 2, and agriculture. Yellow Creek has temporary modifications for all numeric standards equal to the current conditions with a modification expiration date of February 2009. White River Segment 13b has a use-protected designation of no change in numeric standards, based on their present classification. Existing standards are recommended because this segment has only a minimal number of standards (WQCC, 2004a).

The portion of the Piceance Creek drainage downstream of the project area is listed as all tributaries to Piceance Creek, from the source to the confluence with the White River, except Segments 17 and 20 – Segment 16 of the White River. Segment 16 has use designations of aquatic life warm 2, recreation 2, and agriculture. Segment 16 has a use-protected designation based on the current classification. Existing standards are recommended because this segment has only a minimal number of standards (WQCC, 2004a).

The "Status of Water Quality in Colorado – 2004" (CDPHE, 2004b) was reviewed for information related to the project area drainages. White River Segments 13b (Yellow Creek) and 16 (Piceance Creek tributaries) were noted to have fully-supporting aquatic life warm 2, fully-supporting recreation 2, and fully-supporting agriculture designated uses. White River Segments 13b and 16 have a Colorado integrated reporting category of 1 which is described as: "Fully supporting for all uses. All uses have been assessed and all uses are fully supporting the designated uses"

Colorado Regulations Nos. 93 and 94 (CDPHE, 2004c and 2004d, respectively) were reviewed for information related to the project area drainages. Regulation No. 93 is the State's list of water-quality-limited segments requiring Total Maximum Daily Loads (TMDLs). The 2004 list of segments needing development of TMDLs includes one segment within the White River - segment 9b, White River tributaries North & South Forks to Piceance Creek, specifically the Flag Creek portion (for impairment from selenium with a low priority for TMDL development).

Regulation 94 is the State's list of water bodies identified for monitoring and evaluation, to assess water quality and determine if a need for TMDLs exists. The list includes five White River segments that are potentially impaired – 9, 12, 13a, 21, and 22. Neither Segment 13b nor 16 were listed.

Ground Water: The project area is located within the Piceance Creek structural basin. Snowmelt and rain recharge the bedrock aquifers and replenish the ground water that migrates through the Uinta and Green River Formations (Tobin, 1987). Piceance Creek drainage basins upper and lower aquifers are separated by the semi-confining Mahogany Zone. Information presented in Topper et al. (2003) indicates the following approximate depths to potentiometric surfaces within hydrogeologic units: upper Piceance basin aquifer 600 feet, lower Piceance basin aquifer 700 feet, and Mesa Verde aquifer 400 feet (based on a surface elevation of 7,400 feet). Water well data from the Colorado Division of Water Resources (Topper et al., 2003) indicated that in central Rio Blanco County water wells are not common in the basin. In the project area the total concentration of dissolved constituents in the upper and lower aquifers is generally lower than 1000 milligrams per liter. Primary hydrogeologic units within the Piceance Basin are listed in the following table.

Summary of Hydrogeologic Units

Hydrogeologic Unit	Thickness (ft)	Approx Avg Depth (ft)	Conductivity (ft/day)	Yield (gpm)	Transmissivity (ft^2/day)
Upper Piceance Basin aquifer	0 – 1,400	700	<0.2 to >1.6	1 to 900	610 to 770
Lower Piceance Basin aquifer	0 – 1,870	2,800	<0.1 to >1.2	1 to 1,000	260 to 380
Mesaverde aquifer	Averages 3,000	7,700	NL	NL	NL
Abbreviations: ft – feet, approx – approximate, avg – average, gpm – gallons per minute, and NL – not listed.					

Table information from Topper et al. (2003).

Environmental Consequences of the Proposed Action: Surface Water: The primary potential water quality impact would be from additional sediment resulting from the proposed construction. Removal of vegetative cover results in the potential for increased soil erosion near newly disturbed areas. Runoff-produced from storm events could increase sediment loads in ephemeral channels. Depending on the soils affected, salt content in the sediment may also degrade water quality.

The magnitude of these impacts is dependent on the amount of surface disturbance and climatic conditions during the time the soils are exposed to the elements. Impacts would continue until mitigation has been implemented and proven to be successful. Such mitigation would include revegetating the pipeline route as soon as possible, placing gravel on areas that would not be revegetated, or placing check dams to control runoff.

Ground Water: No impact on groundwater resources is anticipated because, in general, the maximum depth of surface disturbance would be 36".

Environmental Consequences of the Alternate Route: Impacts would be similar to those noted for the Proposed Action.

Environmental Consequences of the No Action Alternative: None.

Mitigation: Oil and gas operations are considered to be a light industrial activity by the Colorado Department of Public Health and Environment. As an industrial discharger, the applicant is required to obtain permits authorizing the discharge of stormwater from these sites. The permit requires development of a stormwater management plan showing how BMPs would be used to control runoff and sediment transport. Submit the stormwater management plan to BLM showing how BMPs will be utilized to prevent stormwater erosion.

When preparing the site, all suitable topsoil should be stripped from the surface of the location and stockpiled for reclamation once the pipeline is completed.

All sediment control structures or disposal pits will be designed to contain a 100-year, 6-hour storm event. Storage volumes within these structures will have a design life of 25 years.

All activity shall cease when soils or road surfaces become saturated to a depth of three inches unless otherwise approved by the Authorized Officer.

Vegetation or artificial stabilization of cut and fill slopes shall be provided for in the design process. Establishment of vegetation where it inhibits drainage from the road surface or where it restricts safety or maintenance shall be avoided.

Eliminate undesirable berms that retard normal surface runoff.

Finding on the Public Land Health Standard for water quality: Water quality in the stream segments within the project area meets the criteria established in the standard. With

successful reclamation, the proposed and potential actions in the project area would not change this status.

CRITICAL ELEMENTS NOT PRESENT OR NOT AFFECTED:

No flood plains, riparian or wetland systems, prime and unique farmlands, wild and scenic rivers, Areas of Critical Environmental Concern or Wilderness exist within the area analyzed. The Public Land Health Standard for wetland or riparian systems is not applicable to this action, since none of the alternatives considered would have any influence on it. There are also no Native American religious or environmental justice concerns associated with the proposed action.

NON-CRITICAL ELEMENTS

The following elements **must** be addressed due to the involvement of Standards for Public Land Health:

SOILS (includes a finding on Standard 1)

Affected Environment: The soil types in the project area occur from 5,100 to 7,600 feet in elevation. The average annual precipitation in the project area is 14 to 18 inches, the average annual temperature is 42 to 45 degrees F, and the average frost-free period is approximately 80 to 105 days. The proposed pipeline construction would occur within two soil units inventoried by the Natural Resources Conservation Service (NRCS). Soil units, names, and characteristics are listed in the following table (NRCS, 2004):

Summary of Project Area Soil Units							
Soil Map Unit	**Soil Unit Name**	**Slope (%)**	**Ecological Site**	**Effective Rooting Depth (in)**	**Runoff**	**Erosion Potential**	**Bedrock Depth(in)**
73	Rentsac Channery loam	5 – 50	Pinyon Juniper Woodlands	10 to 20	Rapid	Moderate to very high	10 to 20
104	Yamac loam	2 - 15	Rolling Loam	≥ 60	Medium	Slight to moderate	≥ 60

Both soil units have listed salinity values of less than 4 Mmhos per centimeter. One of the soil units has potential for a fragile soil with listed slope ranges that exceed 35 percent, the criteria that would trigger implementation of a Controlled Surface Use stipulation. Examination of Figure 2 indicates that the steepest surface slope of the Proposed and Alternate pipeline routes is located southwest of the American Soda Plant Site. Surface slope in this area is 10 percent or less, based on the topography shown on Figure 2.

Environmental Consequences of the Proposed Action: Pipeline construction would remove surface cover and disturb soils, thus potentially increasing soil erosion and reducing soil

health and productivity. Actions considered in this analysis and their potential to produce soil disturbance are as follows:

1. Access for the proposed pipeline would be along existing roads or within the pipeline ROW. Therefore no soil disturbance due to road construction is anticipated.
2. The following table depicts the expected disturbance to the two soil types. With successful reclamation, the entire disturbance would eventually be revegetated.

Summary of Soil Disturbance			
Facility	Soil Mapping Unit		Total Area (acres)
	#73 Rentsac Channery loam	#104 Yamac loam	
Proposed Pipeline	2.4	8.0	10.4
Alternate Pipeline	1.4	11.4	12.8

The total area of disturbance over both soil units would be approximately 10.4 acres for the proposed alignment and 12.8 acres for the Alternate alignment. After successful reclamation, all project areas disturbed by pipeline construction would be revegetated and no land would be in an unvegetated state for the life of the project (30-40 years) or longer. For the Proposed alignment, maintenance and repair activities for some pipeline areas could result in damage to vegetation due to vehicle traffic over the revegetated pipeline ROW. For the Alternate alignment, potential future maintenance and repair activities would use the existing road surface to access all areas of the pipeline.

Environmental Consequences of the Alternate Route: Impacts would be similar to those noted for the Proposed Action but the potential extent of the impacts would be greater since the pipeline length and total disturbance would be greater.

Environmental Consequences of the No Action Alternative: None.

Mitigation: Segregation of topsoil material and replacement of top soil in its respective original position (last out, first in) would assist in the reestablishment of soil health and productivity. Erosion control practices and Best Management Practices must be implemented, and reseeding of the disturbed areas would be done in accordance with BLM stipulations.

Water bars or dikes shall be constructed on all of the rights-of-way, and across the full width of the disturbed area, as directed by the authorized officer.

Slopes within the disturbed area shall be stabilized by non-vegetative practices designed to hold the soil in place and minimize erosion. Vegetation cover shall be reestablished to increase infiltration and provide additional protection from erosion.

When erosion is anticipated, sediment barriers shall be constructed to slow runoff, allow deposition of sediment, and prevent it from leaving the site. In addition, straining or filtration mechanisms may also contribute to sediment removal from runoff.

Finding on the Public Land Health Standard for upland soils: Soils within the project area meet the criteria established in the standard for upland soils. With successful reclamation, neither the proposed route nor the alternate route would change this status.

VEGETATION (includes a finding on Standard 3)

Affected Environment: There are two principal plant communities on public land in the project area that would be affected by construction of the pipeline, Wyoming big sagebrush shrublands and pinyon/juniper woodlands.

Wyoming big sagebrush communities with a grass/forb understory occur for the most part northwest of County Road 83. These communities form the sagebrush parks that are intermingled within pinyon/juniper woodlands in this part of the basin. This community is a Rolling Loam ecological site.

Wyoming big sagebrush cover varies from 20 to 30 percent. Other shrubs, winterfat, snakeweed and low rabbitbrush, make up about 5 to 10 percent of the vegetative cover. Perennial grass and forbs account for less than 20 percent of the cover. Bare ground of 25 to 30 percent is fairly high for this ecological site. Cover and production from herbaceous species are below the average for this site, and as a result, most of the rolling loam site in this area is at the high end of the mid-seral classification.

Pinyon and juniper have encroached into the rolling loam site along the interface of the two ecological sites. A substantial acreage of the rolling loam site in and around the project area has a 20 to 25 percent cover of trees giving this shrub-dominated site an appearance of pinyon/juniper woodland. There is still sufficient production and cover of shrub and herbaceous species to maintain this ecological site in a mid-seral classification. The distances and acreages noted below for the pinyon/juniper dominated land includes these rolling loam sites with a dominate cover of pinyon and juniper.

The pinyon/juniper woodlands ecological site occurs on shallower upland soils and along ridge crests. The woodlands northwest of County Road 83 form long narrow stringers intermingled with the sagebrush parks. Most of these stands are fairly open with 30 to 40 percent tree cover. A high percentage of the tree cover is from short stature Utah juniper. Wyoming sagebrush cover within these stands is around 10 to 15 percent and cover from herbaceous species at 5 to 10 percent.

The woodlands southeast of County Road 83 are more contiguous. A chained area, where the trees were uprooted over 40 years ago, has reverted a large block of the woodlands on this side of the road to a thicket of even aged pinyon and juniper trees that are about 10 to 12 feet tall. Only a narrow strip (50 to 200 feet wide) of undisturbed older trees occurs between the chained area and the road.

The proposed route is approximately 10,770 feet in length. This route would cross approximately 5,160 feet of pinyon/juniper dominated land of which 1,385 feet are in the old chained area and

3,775 feet are in undisturbed woodlands of varying ages and densities. The remaining 5,585 feet of the route would cross Wyoming big sagebrush dominated shrublands.

The alternate route is approximately 14,260 feet in length. This route would cross 7,400 feet of pinyon/juniper dominated land of which 1,385 feet are in the old chained area and 6,015 feet are in undisturbed woodlands of varying ages and densities. The remaining 6,860 feet of the route would cross Wyoming big sagebrush dominated shrublands.

Environmental Consequences of the Proposed Action: Construction of the pipeline would remove vegetation from about 10.4 acres. Of this, 5.0 acres of the disturbance would occur to areas dominated by pinyon/juniper, and 5.4 acres of the disturbance would occur to sagebrush dominated areas.

This disturbance would remain non-vegetated for only a short period of time if successfully reclaimed. It is expected that the cover and production of herbaceous species on the sagebrush and pinyon/juniper communities would exceed current levels within three years following the disturbance.

The loss of Wyoming big sagebrush from the Rolling Loam upland sites would take much longer for this shrub to achieve pre-disturbance levels. It could take 15 years for this form of sagebrush to re-enter the disturbed areas and as long as 30 years to achieve pre-disturbance levels.

The pinyon or juniper trees removed by disturbance would be a long term loss. It could take 40 to 50 years for trees to begin showing up on the disturbed sites. It is likely that pre-disturbance cover values for pinyon and juniper would not be achieved within 100 years.

Disturbances associated with the proposal could be subject to an invasion of very competitive weedy plants, some native some not. Invasion of these weedy species can create problems in future reclamation efforts. It usually takes a couple of growing seasons for these species to develop sufficient seed for dominance of the disturbance. The longer the disturbance remains non-vegetated, the greater the chance for invasion of these weedy plants onto the site. Once the disturbance becomes dominated by weedy species, reclamation with desirable native perennial species becomes very difficult. What should be a short term impact could become a long term invasion of weedy species which usually requires additional resources and strategies to control the unwanted vegetation before successful reclamation can be achieved.

Environmental Consequences of the Alternate Route: The impacts of the alternate route would be much the same as the proposed route, just more acreage impacted. Construction of the pipeline along this route would remove vegetation from about 12.8 acres. Of this, 7.8 acres of the disturbance would occur to areas dominated by pinyon/juniper, and 5.0 acres of the disturbance would occur to sagebrush dominated areas.

Approximately 3.76 acres of the disturbance to pinyon/juniper woodlands would occur adjacent to County Road 83. There is a leave strip of mature trees 50 to 200 feet wide between the road and the old chained area that were left as a visual buffer along the edge of the chaining.

Construction of the pipeline along this route would remove most of the mature trees that were left between the road and the chaining.

Environmental Consequences of the No Action Alternative: None

Mitigation: All disturbed areas for the pipeline would be reclaimed within the first growing season or prior to the first full growing season following disturbance with a seed mix specified by the Authorized Officer. Successful revegetation should be achieved within three years. The operator will be required to monitor the project site(s) for a minimum of three years post-construction to detect the presence of noxious/invasive species. Any such species which occur will be eradicated using materials and methods approved in advance by the Authorized Officer.

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Wildlife, Aquatic and Wildlife, Terrestrial)*:* Most of the public land plant communities within the area of the proposed action have an appropriate age structure and diversity of species which meet the criteria established in the standard for vegetation. With successful reclamation, neither the proposed action nor the alternate route would change this status.

WILDLIFE, AQUATIC (includes a finding on Standard 3)

Affected Environment: There is no aquatic wildlife within or potentially affected by the project area.

Environmental Consequences of the Proposed Action or Alternate Route: None.

Environmental Consequences of the No Action Alternative: None.

Mitigation: None.

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Vegetation and Wildlife, Aquatic): Because there is no aquatic wildlife within the project area, the standard is not applicable.

WILDLIFE, TERRESTRIAL (includes a finding on Standard 3)

Affected Environment: The project area is located on relatively flat benches between main Piceance Creek and Yellow Creek on the west at an elevation of about 6,600 feet. The broad flat ridges are a mosaic of open sagebrush parks and patches of pinyon/juniper woodland. Stands of pinyon/juniper on the ridge tops are mostly small younger trees or very open stands of mature trees of relatively small stature. Pinyon/juniper stands adjacent to and on the steeper slopes of larger drainages including the area adjacent to County Road 83, tend to be mature slightly larger trees. The segment of the proposed pipeline east of County Road 83 is located in an old chaining which is now covered by a young pinyon/juniper stand. Revegetation of power and pipe line rights-of-way on the east end of the proposed pipeline route indicate bitterbrush, 4-

wing saltbush, Indian ricegrass and brome grass can all be successfully seeded in this area. The sagebrush parks along the ridge tops are covered with Wyoming Big Sagebrush with relatively sparse herbaceous layers of phlox, western wheatgrass, Indian ricegrass and prickly pear cactus.

In early February, 2005 mule deer were quite abundant on the area, which is classified as severe critical winter range habitat for mule deer. No evidence of current or past elk use was noted on the area in early February of 2005.

Pinyon/juniper woodlands likely to be impacted by this project are of marginal value as raptor nesting habitat, primarily due to the small stature of the trees and in some areas the open nature (low density) of the stands. The only areas providing minimal potential for raptors such as red-tailed hawk, sharp-shinned hawk and Cooper's hawk are along County Road 83 and about 700' of the new route segment in the SE¼NW¼ of Section 19. It should be noted that the area north of County Road 83 was chained in the past and only a strip of standing mature trees remains. There are no cliffs in the project area.

Environmental Consequences of the Proposed Action: The construction of approximately 1.5 miles of pipeline adjacent to existing roads and 0.5 miles of cross-country pipeline construction would temporarily remove 10.4 acres of sagebrush and woodland habitat. Since this area is severe critical habitat for mule deer any loss of forage production is of concern. Revegetation with plants palatable to wildlife provides an opportunity to improve forage for wildlife in the long term.

The proposed pipeline route will remove approximately 700' of mature pinyon/juniper woodland habitat offering marginal raptor nesting habitat. Pinyon/juniper habitat along the remainder of the route to be removed is small and young in nature, and on the east end has been altered in the past through chaining and right-of-way clearing and is of little value as raptor nesting habitat.

Environmental Consequences of the Proposed Action or Alternate Route: The alternate route to follow existing roads the entire length, would eliminate the need to build a ½+-mile segment of cross-country pipeline. Although additional clearing would be 30' wide (60'wide along County Road 83), the increased distance would result in total disturbance increasing by slightly less than three acres. Removal of pinyon/juniper woodland with limited potential for raptor nesting would be increased by approximately 3 acres following the alternative route.

Environmental Consequences of the No Action Alternative: No additional disturbance of wintering big game associated with commercial oil and gas development, or net loss of severe/critical deer winter habitat would occur at this time and this place. Although current use of the road corridors will continue, the more intense activity of pipeline construction would not have the potential of disturbing raptor nesting activity.

Mitigation: As this project occurs on severe critical deer winter range a seasonal restriction on clearing and construction of the pipeline should be put in place. No development activity will be allowed from December 1 through April 30. Exceptions and modifications to this condition of approval would follow protocols developed in the White River ROD/RMP.

The ½-mile segment of cross-country pipeline construction between BLM Road 1146 and County Road 83 should be rendered impassable for subsequent vehicular use following construction. After being ripped and seeded, the proponent will remain responsible for effectively deterring any form of vehicular use on this portion of the right-of-way until regenerating shrubland vegetation fully obscures the right-of-way. Although the proponent may use any means to achieve this objective acceptable to the Authorized Officer, it should be noted that barricades have proven to be remarkably ineffective at deterring use of cleared right-of-ways in this Resource Area. Likewise, that segment of the pipeline route between County Road 83 and the tie-in point on the American Soda pipeline should be conditioned to prevent vehicle use. These reclamation provisions would also require that the pipeline be designed such that no feature requiring routine maintenance or access would be located on these pipeline segments (e.g., drips, metering facilities, or valves).

As severe/critical winter range winter forage production for mule deer is of major concern, revegetation of the pipeline and other disturbed areas should include plants palatable and nutritious to mule deer. The following forbs would be included in the reclamation seed mix at the following PLS rates: scarlet globemallow (0.5 lb per acre), Utah sweetvetch (1 lb per acre), arrowleaf balsamroot (1 lb per acre), and Lewis flax (0.5 lb per acre).

Pinyon/juniper woodland with potential for raptor nesting should be surveyed prior to construction and disturbance activities. On the proposed route this would include approximately 700' of right of way and adjacent woodland in T.1S R.97W section 19 SE¼NW¼ and SW¼NE¼. If the alternate route is selected the segment adjacent to County Road 83 should be surveyed. Should construction occur outside the raptor nesting season (April 15 to Aug 15) only the disturbed right of way would require a survey.

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Vegetation and Wildlife, Terrestrial): This project would not jeopardize the viability of any animal population. It would have no significant consequence on terrestrial habitat condition, utility, or function, nor have any discernible effect on animal abundance or distribution at any landscape scale. The public land health standard will thus be met.

OTHER NON-CRITICAL ELEMENTS: For the following elements, only those checked in the last column will be addressed further in this EA.

Non-Critical Element	NA or Not Present	Applicable or Present, No Impact	Applicable & Present and Brought Forward for Analysis
Access and Transportation			X
Cadastral Survey	X		
Fire Management		X	
Forest Management			X
Geology and Minerals		X	
Hydrology/Water Rights	X		
Law Enforcement		X	

Non-Critical Element	NA or Not Present	Applicable or Present, No Impact	Applicable & Present and Brought Forward for Analysis
Noise		X	
Paleontology			X
Rangeland Management			X
Realty Authorizations			X
Recreation			X
Socio-Economics			X
Visual Resources			X
Wild Horses	X		

ACCESS AND TRANSPORTATION

Affected Environment: Much of the proposed route and almost the entire alternative route would be adjacent to existing roads. The two routes are coterminous for the first 6,425 feet from the well south along BLM Road 1146, the existing access road (Figure 2). The alternative route remains adjacent to that road until it joins BLM Road 1147 and follows that road until it meets and intersects Rio Blanco County Road 83. From that point, the route parallels the county road to a point near the American Soda Plant. After leaving BLM Road 1146, the proposed pipeline route goes cross country for the remainder of its length but intersects Rio Blanco County Road 83 near the American Soda Plant. The amount of travel along the county road is usually low, limited to oil and gas personnel, local ranchers and the occasional recreationists. Travel along the BLM roads is even more infrequent.

Motorized vehicle travel on public lands within the area of the proposed action is limited to existing roads from October 1 to April 30 each year. Cross-country motorized vehicle travel is allowed from May 1 to September 30 as long as no resource damage occurs as a result.

Environmental Consequences of the Proposed Action: Construction of the pipeline would contribute to traffic along the county road for a period of up to 30 days. At the point where the proposed pipeline route intersects CR 83 and is to be trenched across the road, traffic may be impeded but would not be stopped and would be managed according to the traffic control conditions of the applicant's county permit. The impact would be low since traffic levels are low. The condition of the roadway should be returned to its previous condition by the applicant.

Where the proposed route follows BLM Road 1146 (the well access road), the applicant would be required to stay within the corridor surveyed for cultural resources. This will necessitate that the roadway itself would be used as a temporary use area for location of equipment and material. (See cultural stipulations.) Traffic along the roads could at times be delayed but the applicant will be required to allow passage of vehicles through the work site. The impact of any delays would be low since traffic levels are low.

There is potential for the pipeline route through the undisturbed area to become a new route for off-highway vehicles. Installation of barriers at both ends of the new disturbance, on BLM Road 1146 and County Road 83, would discourage this use.

Environmental Consequences of the Alternate Route: Impacts would be of the same nature, but the impact on travel along the BLM roads, while still very low, would be increased because more of the route would be along BLM roads.

Environmental Consequences of the No Action Alternative: None.

Mitigation: The applicant will be permitted to use the surface of BLM Roads 1146 and 1147 as temporary work areas (See Cultural Stipulations.) While the road surfaces are in use as pipeline temporary use areas, the sites are to be managed so that traffic will still be able to move along the roadways with only short-term delays.

Place barriers at each end of the new disturbance to discourage creation of a new road. (See wildlife stipulations.)

FOREST MANAGEMENT

Affected Environment: As noted in the vegetation section, the proposed and alternate routes would affect pinyon/juniper woodlands. The proposed route would cross approximately 5,160 feet of pinyon/juniper dominated land of which 1,385 feet are in the old chained area and 3,775 feet are in undisturbed woodlands of varying ages and densities. The alternate route would cross 7,400 feet of pinyon/juniper dominated land of which 1,385 feet are in the old chained area and 6,015 feet are in undisturbed woodlands of varying ages and densities.

The woodlands northeast of County Road 83 contain short stature trees most of which are juniper. These stands have minimal amounts of suitable firewood (larger pinyon and/or juniper trees). There are some junipers suitable for fence posts, however, most of the post sizes in areas adjacent any road in this area have been cut.

The only pinyon/juniper stands with a moderate amount of suitable firewood is the segment along side County Road 83. This stand is only 50 to 200 feet wide between the road and the old chained are just to the southeast. There is insufficient firewood in this stand to be of commercial value.

The old chained area between County Road 83 and the tie-in point on the American Soda pipeline does have some pinyon trees that are suitable for Christmas trees. However, most of the trees in this area are reaching a size that is to large for most commercial operations.

Environmental Consequences of the Proposed Action: The proposed route would not result in loss of any woodland products of commercial value. The area involved is small enough and would not have any significant impact on availability of future commercial woodland products.

Environmental Consequences of the Alternate Route: Same.

Environmental Consequences of the No Action Alternative: None

Mitigation: Trees within the right-of-way would be removed by cutting or chipping to remove any root-balls. Cut trees would be stockpiled along the line and placed back over the right-of-way during final reclamation of the right-of-way to provide mulch and to prevent off-highway vehicle use of the right-of-way.

PALEONTOLOGY

Affected Environment: The proposed gathering system and gas processing plant are located in an area mapped as the Uinta Formation (Tweto 1979). BLM has classified the Uinta Formation as a Condition I formation, meaning that it is a known producer of scientifically significant fossils. At one point on the proposed route a known paleo-vertebrate site (#3154) is near the pipeline alignment in the NW¼SE¼ of Section 19, T. 1 S., R. 97 W.

Environmental Consequences of the Proposed Action: Since the proposed action would occur within the Uinta formation, there is potential for impacting fossil resources if it is necessary to excavate into the underlying bedrock formation to construct the pipeline. This is especially the case of the known paleo-vertebrate site in the NW¼SE¼ of Section 19, T. 1 S., R. 97 W.

Environmental Consequences of the Alternate Route: Same.

Environmental Consequences of the No Action Alternative: None

Mitigation: A paleontological monitor shall be present at any time that it becomes necessary to excavate into the underlying bedrock formation in order to bury the pipeline.

A BLM approved paleontologist will be required to be on-site to monitor construction activities near the known paleo-vertebrate site #3154 in the NW¼SE¼ of Section 19, T. 1 S., R. 97 W.

Should fossil resources be discovered at any time during construction, all construction activity in the vicinity of the discovery shall cease until the BLM and an approved paleontologist have time to evaluate the discovery and recover the remains. Work shall not resume in the area of the find without written approval of the Authorized Officer.

RANGELAND MANAGEMENT

Affected Environment: Both the proposed and alternate routes would occur on public land within the Square S Grazing Allotment. The Square S grazing allotment has two permit holders authorized to graze cattle on 64,050 acres of public land for a total of 3,537 animal unit months (AUMs). An AUM equates to the forage needs of a mature cow with calf for one month. The allotment is utilized May through February the following year. The area of the proposed

project is used primarily during May and early June on alternate years with late fall/early winter use other years.

Rangeland Improvements: A BLM livestock waterline, the Yellow Creek Pipeline project #4119, lies on the west edge of the access road to the Mallard 4804 well. The waterline parallels the road from a point in SW¼NW¼ (Lot 2) of Section 19, T. 1 S., R. 97 W. to a point ½ mile north of the Mallard 4804 well (refer to Figure 2). The waterline is a PE plastic line buried about 18 inches deep within 5 feet of the west edge of the access road. The proposed gas line would cross the waterline at the Mallard 4804 well. The gas line would also cross a spur of the waterline which leads to a watering trough about 40 feet east of the access road (the spur crosses the access road). The watering trough lies in the NE¼SW¼ of Section 18, T. 1 S., R. 97 W. (refer to Figure 2).

Environmental Consequences of the Proposed Action: The actions proposed would result in a forage loss to livestock of about 1.5 animal unit months. This loss would be only short term until successful reclamation of disturbed areas had occurred.

The short-term forage loss is not expected to result in any changes in livestock use of the allotment. The allotment has the capacity and flexibility to absorb this level of forage loss. Reclamation of disturbed areas would likely offset the short-term forage loss on the allotment within two to three years through increased herbaceous production above current production levels. No long term forage loss is expected.

The proposed action could interfere with proper functioning of the livestock waterline near the proposal. The proposed gas line would sever the waterline in two locations (as noted above). In addition, the waterline is within 5 feet of the access road, shallow and could be crushed by any heavy trucks or equipment that pull off the west side of the access road.

Environmental Consequences of the Alternate Route: The alternate route would result in a forage loss to livestock of about 2 animal unit months. This loss would be only short term until successful reclamation of disturbed areas had occurred. Impacts to the waterline noted for the Proposed Action would be the same for the alternate route.

Environmental Consequences of the No Action Alternative: None.

Mitigation: The waterline will be replaced with a 25 foot minimum section of SDR- 11 HDP pipe at the two locations in which the proposed gas line crosses the waterline (at the crossing at the Mallard 4804 well and at the crossing of the waterline leading to the watering trough in the NE¼SW¼ of Section 18, T. 1 S., R. 97 W.) (Refer to Figure 2).

To prevent crushing the water line, no off road parking or use by any motorized vehicles or equipment will be allowed on the west side of the access road between the Mallard 4804 well and the point in SW¼NW¼ (Lot 2) of Section 19, T. 1 S., R. 97 W. (refer to Figure 2).

REALTY AUTHORIZATIONS

Affected Environment: All of the estimated 2.04 miles of the proposed pipeline route and 2.7 miles of the alternative route would be located on federal lands administered by BLM.

Environmental Consequences of the Proposed Action: A right-of-way would be required for either pipeline route. The application for the pipeline has been serialized as COC68450.

Environmental Consequences of the Alternate Route: Same.

Environmental Consequences of the No Action Alternative: None.

Mitigation: None

RECREATION

Affected Environment: The proposed action occurs within the White River Extensive Recreation Management Area (ERMA). BLM custodially manages the ERMA to provide for unstructured recreation activities such as hunting, dispersed camping, hiking, horseback riding, wildlife viewing and off-highway vehicle use. The most intense recreation activity in the area is likely to be hunting during the fall seasons.

The northernmost part of the project area most closely resembles the Semi-Primitive Motorized (SPM) class. A natural appearing environment with few administrative controls typically characterizes an SPM recreation setting; there is low interaction between users but evidence of other users may be present. An SPM recreation experience is characterized by a high probability of isolation from the sights and sounds of humans within an environment that offers challenge and risk. The greater part of the project area – within ½ mile or so of the American Soda processing plant – most closely resembles a Roaded Natural (RN) class. RN settings are characterized by a generally natural environment but resource modifications are noticeable and may be substantial. Encounters with other users of the area are more probable than in a SPM setting. Experiences in a RN setting encompass the probability of encountering the sights and sounds of man just as frequently as experiencing isolation.

Environmental Consequences of the Proposed Action: There would be no long-term loss of recreation potential in the project area but the public would most likely not recreate in the vicinity of the pipeline route during construction. This would especially be the case if construction were to occur during the hunting season (September through November) because it would disrupt the experience sought by those recreationists and would cause game to disperse to other areas, reducing the chance for a successful hunt.

After construction, the pipeline would not materially conflict with either the SPM or RN setting or the experiences to be expected in these settings. Pipeline maintenance activities would be infrequent and would not measurably increase the likelihood of interaction with others while recreating in the area.

Environmental Consequences of the Pipeline Alternate Route: Same.

Environmental Consequences of the No Action Alternative: None of the loss of dispersed recreation potential would occur and there would be no impact on recreationists.

Mitigation: None.

SOCIO-ECONOMICS

Affected Environment: The proposed action and the alternative would be developed in Rio Blanco County but construction resources could also be drawn from Garfield County, Mesa County and eastern Utah. Rio Blanco County had a 2002 population of 6,063, almost unchanged from the 1990 level of 6,051. The major communities in the county are Meeker (2,272 population in 2002) and Rangeley (2,108). The county underwent a substantial economic and demographic growth in the late 1970's and early 1980's as major energy companies attempted to develop oil shale as a national energy fuel source. After a decline in jobs and population from the boom levels, the number of jobs and people in the county has remained static. Currently, the government sector makes up almost a third of all jobs in the county. The traditional farming and ranching sector has been supplemented in the last few years by a growing number of jobs in the oil and gas extraction industry as drilling and related processing activity has expanded. Many of the resources for development of the oil and gas resource come out of Garfield County, Mesa County, or Uintah County in Utah and locate in Rio Blanco County on only a temporary basis.

In addition to oil and gas exploration and development, the other major economic activity that occurs in the project area is livestock grazing.

Environmental Consequences of the Proposed Action: The employment required for construction of the pipeline and gas processing plant would be no more than 20 workers. These employees would not represent new employment for the area but would be workers already available in the area or from nearby communities in western Colorado or eastern Utah. Motels, restaurants, grocery stores, gas stations, vehicle and equipment repair shops may all experience some additional activity. The facilities developed by the proposed action would expand the local property tax base. The net effect of these impacts would be considered beneficial but low.

Environmental Consequences of the Alternate Route: Same.

Environmental Consequences of the No Action Alternative: None.

Mitigation: None.

VISUAL RESOURCES

Affected Environment: Public lands administered by BLM in the project area have received VRM Class III designation. The management goal for this class is to partially retain the

existing character of the landscape. The VRM III designation permits changes brought about by activities to be evident. The visual contrast may be moderate but should not dominate the natural landscape character. Changes should repeat the basic elements found in the predominant natural features of the characteristic landscape.

The landscape in the project area has already undergone some transformation. The American Soda processing plant has been built there and several pipelines and a number of roads transect the area. Public access to the area of the proposed actions is unrestricted and the viewing public includes those who use Rio Blanco County Road 83 and BLM Roads 1146 and 1147. Traffic levels are usually low and the size of the potential viewing public is consequently small.

Environmental Consequences of the Proposed Action: The construction of the pipeline would alter the landscape character somewhat. Removal of vegetation and recontouring of the natural surface introduce linear features into the landscape, offering contrasting soil and vegetation colors and patterns that had not previously been there. This impact would lessen in the long-term as exposed areas were reclaimed and bare soil was not so extensively evident. The pipeline would be most visible where it crosses an undisturbed stand of pinyon/juniper east of BLM Road 1146. Removal of the pinyon, juniper and other vegetation would be a visual scar that would be prominent until the pinyon/juniper community had re-established. The impact of the construction is mitigated by the presence of an already existing road along much of its length and by the presence of the processing plant near the tie-in with the American Soda pipeline. The use of natural paint tones on above-ground facilities would further reduce the visual impact of the project.

Viewed from a distance, the changes in the landscape, with mitigation, would appear to be moderate and would not dominate the natural character of the landscape, meeting the standards of the VRM III classification.

Environmental Consequences of the Alternate Route: The impacts of constructing the pipeline along the alternative route would be similar but would be lessened because the route would not cross through the previously undisturbed pinyon/juniper east of BLM Road 1146.

Environmental Consequences of the No Action Alternative: None

Mitigation: All permanent (onsite for six [6] months or longer) structures, facilities and equipment placed onsite shall be low profile and painted Munsell Soil Color Chart Juniper Green or equivalent within six months of installation.

Disturbed areas shall be restored as nearly as possible to their original contour.

CUMULATIVE IMPACTS SUMMARY: Cumulative impacts from oil and gas development were analyzed in the White River Resource Area PRMP/FEIS. Current development, including the actions proposed, has not exceeded the foreseeable development analyzed in the PRMP/FEIS.

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PERSONS / AGENCIES CONSULTED: None

INTERDISCIPLINARY REVIEW:

Project Team		
Name	**Title**	**Area of Responsibility**
BLM Oversight		
Penny Brown	Realty Specialist	Project Lead; Realty Authorizations
Keith Whitaker	Natural Resource Specialist	Visual Resources
Ed Hollowed	Wildlife Biologist	Migratory Birds; Threatened, Endangered and Sensitive Animal Species; Wildlife; Wetlands and Riparian Zones
Tamara Meagley	Natural Resource Specialist	Areas of Critical Environmental Concern; Threatened and Endangered Plant Species
Chris Ham	Outdoor Recreation Planner	Recreation; Wilderness; Access and Transportation
Mark Hafkenschiel	Rangeland Management Specialist	Vegetation; Invasive, Non-Native Species; Rangeland Management
Michael Selle	Archeologist	Cultural and Paleontological Resources
Caroline Hollowed	Hydrologist	Air Quality; Water Quality, Surface and Ground; Hydrology and Water Rights; and Soils
Paul Daggett	Mining Engineer	Geology and Minerals
Ken Holsinger	Natural Resource Specialist	Fire Management
Bob Fowler	Forester	Forest Management
Valerie Dobrich	Natural Resource Specialist	Wild Horses
Bo Brown	Hazmat Collateral	Wastes, Hazardous or Solid
WestWater Engineering (Third Party Contractor)		
Dan McWilliams	Senior Engineer	Air Quality; Soils; Water Quality, Surface and Ground; Hydrology and Water Rights; Geology and Minerals
Steve Moore	Environmental Scientist	Areas of Critical Environmental Concern; Cultural Resources; Paleontological Resources; Wastes, Hazardous or Solid; Access and Transportation; Wilderness; Realty Authorizations; Recreation; and Visual Resources
Rusty Roberts	Range Conservationist	Threatened and Endangered Plant Species; Invasive, Non-Native Species; Wetlands and Riparian Zones; Vegetation; Fire Management; Rangeland Management; and Wild Horses, Document Preparation
Doug McVean	Wildlife Biologist	Migratory Birds; Threatened, Endangered and Sensitive Animal Species; Wildlife, Terrestrial and Aquatic

Finding of No Significant Impact/Decision Record (FONSI/DR)

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FINDING OF NO SIGNIFICANT IMPACT (FONSI)/RATIONALE: The environmental assessment, analyzing the environmental effects of the proposed action and alternatives, has been reviewed. The approved mitigation measures (attached to the right-of-way grant as stipulations) result in a finding of no significant impact on the human environment. Therefore, an environmental impact statement is not necessary to further analyze the environmental effects of the proposed action for right-of-way COC68450.

WestWater Engineering, an environmental consulting firm, with the guidance, participation, and independent evaluation of the Bureau of Land Management (BLM) prepared this document. The BLM, in accordance with 40 CFR 1506.5 (a) and (c), is in agreement with the findings of the analysis and approves and takes responsibility for the scope and content of this document.

DECISION/RATIONALE: It is my decision to approve the right-of-way grant for a pipeline as described in the Proposed Action. The proposed action would involve less surface disturbance than would be necessary for the alternate route. The proposed action is in concert with the objectives of the White River ROD/RMP in that it would allow development of federal oil and gas resources and would make public lands available for the siting of public and private facilities in a manner that provides for reasonable protection of other resource values. Protection for other resource values will be assured by implementation of the mitigation measures described below and attached to the right-of-way grant as stipulations.

MITIGATION MEASURES:

1. Permitting of all regulated air pollution sources through the Colorado Department of Public Health and Environment (CDPHE), Air Pollution Control Division, will assure compliance with all federal and state standards.

2. The applicant is required to contain any construction activity and disturbance along BLM Roads 1146 and 1147 within a 30 foot corridor immediately adjacent to the roads. In support of that requirement, the applicant will be permitted to use the surface of the existing road as a temporary work area.

3. To assure avoidance of cultural resources along the proposed pipeline route from BLM Road 1146 to the tie-in at the American Soda pipeline, the applicant is required to take additional measures to assure that site integrity is maintained. These measures could include employment of a BLM-certified archaeologist to monitor construction through that portion of the route or checks by a BLM-certified archaeologist before and after construction to document that no disturbance occurred.

4. The operator is responsible for informing all persons who are associated with the project operations that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are uncovered during any project or construction activities, the operator is to immediately stop activities in the immediate area of the find that might further disturb such materials, and immediately contact the AO. Within five working days, the AO will inform the operator as to:

- whether the materials appear eligible for the National Register of Historic Places,
- the mitigation measures the operator will likely have to undertake before the site can be used (assuming in situ preservation is not necessary),
- a timeframe for the AO to complete an expedited review under 36 CFR 800-11 to confirm, through the State Historic Preservation Officer, that the findings of the AO are correct and that mitigation is appropriate.

If the operator wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the operator will be responsible for mitigation cost. The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that the required mitigation has been completed, the operator will then be allowed to resume construction.

5. Pursuant to 43 CFR 10.4(g) the holder of this authorization must notify the AO, by telephone, with written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony. Further, pursuant to 43 CFR 10.4 (c) and (d), the holder must stop activities in the vicinity of the discovery and protect it for 30 days or until notified to proceed by the AO.

6. The operator will eliminate any noxious or invasive plants before any seed production has occurred on the disturbed areas created by this project. Eradication should make use of materials and methods (Pesticide Use Proposal) approved in advance by the AO. Several control efforts may be necessary before sufficient control is achieved. Application of herbicides must be under field supervision of an EPA-certified pesticide applicator.

7. The operator will clean all off-road equipment to remove seed and soil prior to commencing operations on public lands within the project area.

8. The operator will be required to monitor disturbed areas for any noxious or invasive species within the ROW area. Monitoring should occur until successful reclamation efforts have been achieved.

9. The operator will be required to attain sufficient cover of native reclamation species (similar to that of nearby undisturbed plant communities) by controlling invasive plant species by methods approved in advance by the Authorized Officer.

10. The operator shall be required to collect and properly dispose of any solid wastes generated by this project.

11. Oil and gas operations are considered to be a light industrial activity by the Colorado Department of Public Health and Environment. As an industrial discharger, the applicant is required to obtain permits authorizing the discharge of stormwater and hydrostatic test water from these sites. The permit requires development of a stormwater management plan showing how BMPs would be used to control runoff and sediment transport. Submit the stormwater management plan to BLM showing how BMPs will be utilized to prevent stormwater erosion.

12. When preparing the site, all suitable topsoil should be stripped from the surface of the location and stockpiled for reclamation use once construction is completed. (RMP 4)

13. All sediment control structures or disposal pits will be designed to contain a 100-year, 6-hour storm event. Storage volumes within these structures will have a design life of 25 years. (RMP 6)

14. All activity shall cease when soils or road surfaces become saturated to a depth of three inches unless otherwise approved by the AO. (RMP 8)

15. Provide vegetation or artificial stabilization of cut and fill slopes in the design process. Avoid establishment of vegetation where it inhibits drainage from the road surface or where it restricts safety or maintenance. (RMP 24)

16. Eliminate undesirable berms that retard normal surface runoff. (RMP 35)

17. Segregation of topsoil material and replacement of top soil in its respective original position (last out, first in) would assist in the re-establishment of soil health and productivity. Erosion control practices and Best Management Practices must be implemented, and reseeding of the disturbed areas would be done in accordance with BLM stipulations.

18. Slopes within the disturbed area shall be stabilized by non-vegetative practices designed to hold the soil in place and minimize erosion. Vegetation cover shall be re-established to increase infiltration and provide additional protection from erosion. (RMP 97)

19. When erosion is anticipated, sediment barriers shall be constructed to slow runoff, allow deposition of sediment, and prevent it from leaving the site. In addition, straining or filtration mechanisms may also contribute to sediment removal from runoff. (RMP 98)

20. Water bars or dikes shall be constructed on all of the rights-of-way, and across the full width of the disturbed area, as directed by the authorized officer.

21. All disturbed areas for the pipeline will be reclaimed within the first growing season or prior to the first full growing season following disturbance with the specified following native seed mixes (White River ROD/RMP Appendix B, Conditions of Approval).

Native Mix #2 in pounds of pure live seed per acre (lbs/pls/ac*)

Native Mix #2 in pounds of pure live seed per acre (lbs/pls/ac*)	
Western wheatgrass (Rosanna)	2 lbs/pls/ac
Indian ricegrass (Rimrock)	1 lbs/pls/ac
Bluebunch wheatgrass (Whitmar)	2 lbs/pls/ac
Thickspike wheatgrass (Critana)	2 lbs/pls/ac
Needle and thread	0.5 lbs/pls/ac
Utah sweetvetch	0.25 lbs/pls/ac
Cicer's milkvetch**	0.25 lbs/pls/ac
Lewis flax and small Burnette**	0.25 lbs/pls/ac
Antelope bitterbrush**	0.5 lbs/pls/ac
Four-wing saltbush**	0.5 lbs/pls/ac

*Note: Seeding rates given are for drill seeding. The seeding rates will be double for broadcast/harrow seeding.
**Note: These additional species are being added to the seed mix as required by Mitigation Measure #22.

22. As severe/critical winter range winter forage production for mule deer is of major concern. Revegetation of the pipeline and other disturbed areas should included plants palatable to mule deer (bitterbrush, 4-wing saltbush, and several forbs such as cicer milkvetch (monarch), Lewis flax, sanfoin or small Burnette).

23. Pinyon/juniper woodland with potential for raptor nesting should be surveyed prior to construction and disturbance activities. On the proposed route this would include approximately 700' of right of way and adjacent woodland in T.1S R.97W section 19 SE¼NW¼ and SW¼NE¼. Should construction occur outside the raptor-nesting season (April 15 to Aug 15) only the disturbed right of way would require a survey.

24. As this project occurs on severe critical deer winter range a seasonal restriction on clearing and construction of the pipeline should be put in place. No development activity will be allowed from December 1 through April 30. Exceptions and modifications to this condition of approval would follow protocols developed in the White River ROD/RMP.

25. The ½-mile segment of new pipeline construction between BLM Road 1146 and County Road 83 should be closed off following construction, ripped and seeded and both ends barricaded with large boulders or other suitable material to discourage future use. Likewise, that segment of the pipeline route between County Road 83 and the tie-in point on the American Soda pipeline should be barricaded to prevent vehicle use.

26. The applicant will be permitted to use the surface of BLM Roads 1146 and 1147 as temporary work areas (See Cultural Stipulations.) While the road surfaces are in use as pipeline temporary use areas, the sites are to be managed so that traffic will still be able to move along the roadways with only short-term delays.

27. Place barriers at each end of the new disturbance to discourage creation of a new road. (See Mitigation Measure #24.)

28. Trees within the right-of-way would be removed by cutting or chipping to remove any root-balls. Cut trees would be stockpiled along the line and placed back over the right-of-way during final reclamation of the right-of-way to provide mulch and to prevent off-highway vehicle use of the right-of-way.

29. A paleontologist monitor shall be present at any time that it becomes necessary to excavate into the underlying bedrock formation in order to bury the pipeline or construct the gas plant.

30. A BLM approved paleontologist will be required to be on-site to monitor construction activities near the known paleo-vertebrate site #3154 in the NW¼SE¼ of Section 19, T. 1 S., R. 97 W.

31. Should fossil resources be discovered at any time during construction, all construction activity in the vicinity of the discovery shall cease until the BLM and an approved paleontologist have time to evaluate the discovery and recover the remains. Work shall not resume in the area of the find without written approval of the AO.

32. The waterline will be replaced at the two locations in which the proposed gas line crosses the waterline (at the crossing at the Mallard 4804 well and at the crossing of the waterline leading to the watering trough in the NE¼SW¼ of Section 18, T. 1 S., R. 97 W.) (Refer to Figure 2).

33. To prevent crushing the water line, no off road parking or use by any motorized vehicles or equipment will be allowed on the west side of the access road between the Mallard 4804 well and the point in SW¼NW¼ (Lot 2) of Section 19, T. 1 S., R. 97 W. (refer to Figure 2).

34. All permanent (onsite for six [6] months or longer) structures, facilities and equipment placed onsite shall be low profile and painted Munsell Soil Color Chart Juniper Green or equivalent within six months of installation.

35. Disturbed areas shall be restored as nearly as possible to their original contour.

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NAME OF ENVIRONMENTAL COORDINATOR: Caroline Hollowed

SIGNATURE OF AUTHORIZED OFFICIAL: Kent E. Walter
Field Manager

DATE SIGNED: 3/3/05

ATTACHMENTS: Figure 1-General Location Map of the Proposed Action
Figure 2-Location Map of Proposed and Alternate Pipeline Routes

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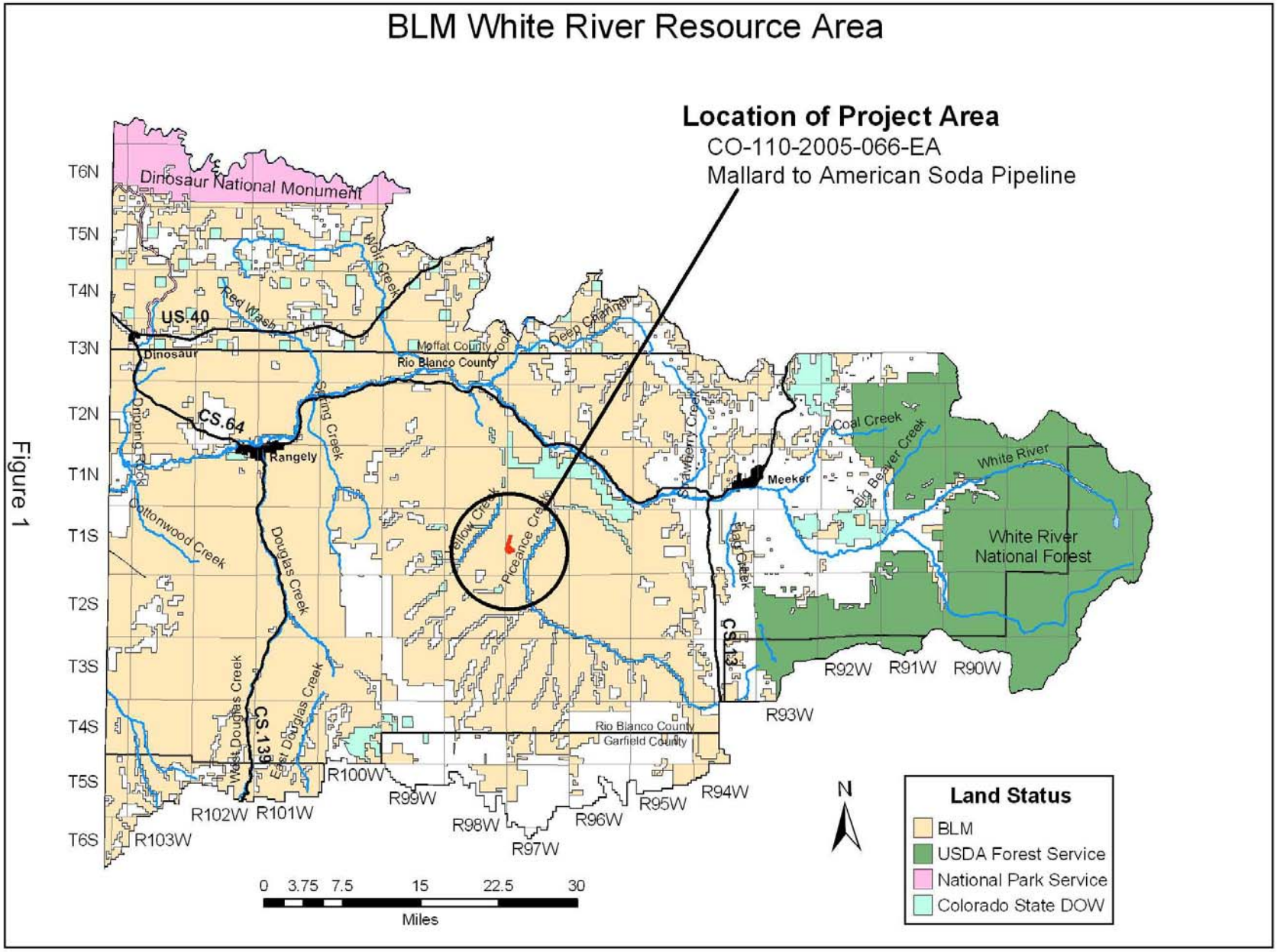
BLM White River Resource Area
Location of Project Area
CO-110-2005-066-EA
Mallard to American Soda Pipeline
Dinosaur National Monument
US 40
Dinosaur
Rangely
CS 64
Meeker
CS 13
CS 139
Moffat County
Rio Blanco County
Garfield County
Red Wash
Wolf Creek
Deep Creek
Dripping Rock
Cottonwood Creek
Douglas Creek
West Douglas Creek
East Douglas Creek
Yellow Creek
Piceance Creek
Strawberry Creek
Coal Creek
Big Beaver Creek
White River
Black Creek
White River National Forest
T6N
T5N
T4N
T3N
T2N
T1N
T1S
T2S
T3S
T4S
T5S
T6S
R103W
R102W
R101W
R100W
R99W
R98W
R97W
R96W
R95W
R94W
R93W
R92W
R91W
R90W
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Miles
N
Land Status
BLM
USDA Forest Service
National Park Service
Colorado State DOW

Figure 1

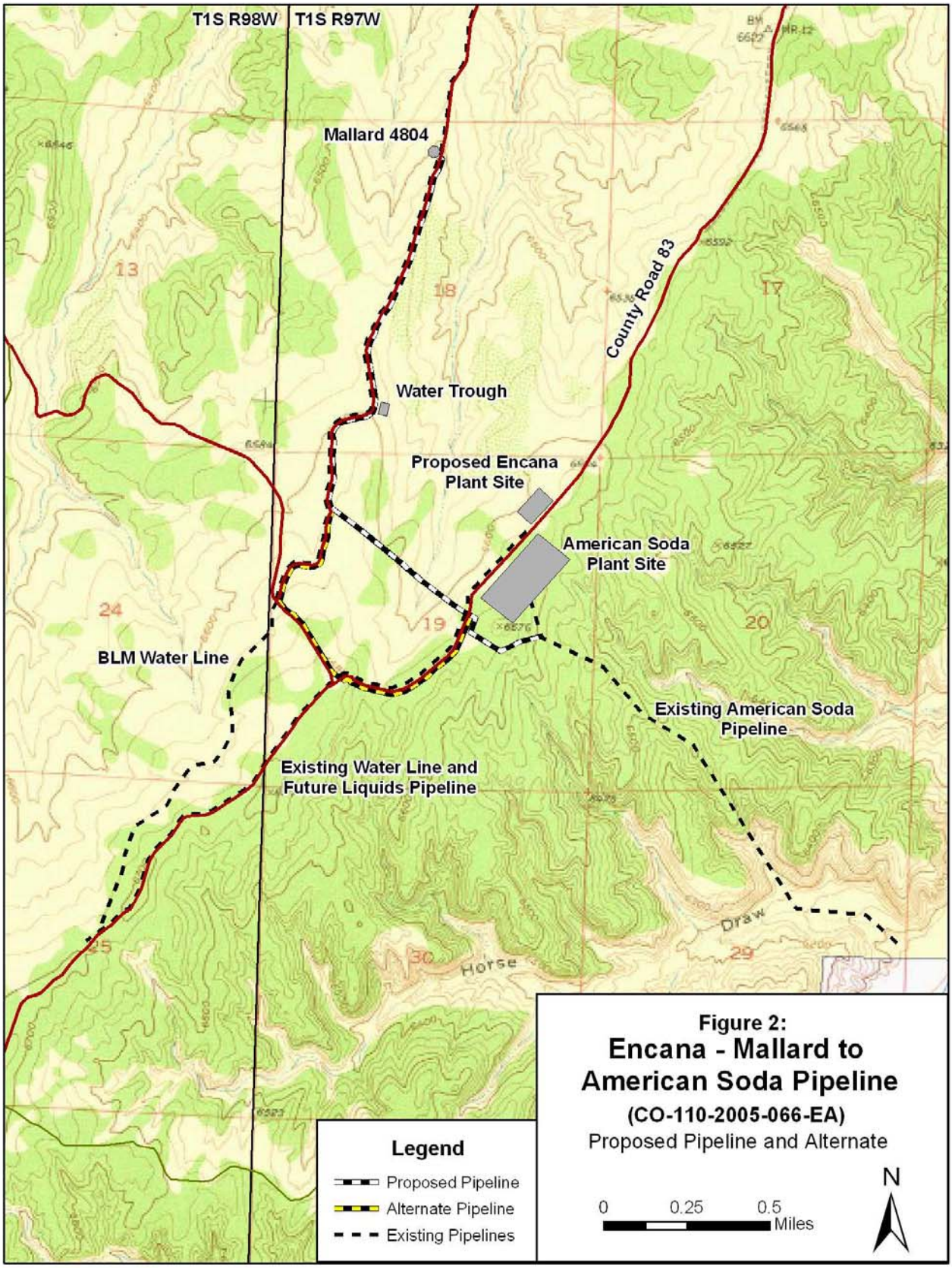

Figure 2:
Encana - Mallard to American Soda Pipeline
(CO-110-2005-066-EA)
Proposed Pipeline and Alternate